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## **Assessing the Structure, Content, and Perceived Social Climate of Residential Posttraumatic Stress Disorder Treatment Programs**

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*This study utilized a comprehensive assessment of program structure, content, and social climate to determine whether specialized residential posttraumatic stress disorder (PTSD) programs (SIPUs, n = 19) can be differentiated from general psychiatric units (GPUs, n = 18) within the Department of Veterans Affairs. Significant differences between program types were found: SIPUs were more clearly differentiated from the larger hospital system, had more strict patient selection criteria and program regulations, longer length of stays and lower admission rates, and spent more program time on PTSD symptoms and war zone experiences than GPUs. Veterans in the SIPUs (n = 453) rated the programs significantly higher on most social climate measures than veterans with PTSD in the GPUs (n = 153), indicating that veterans perceived these programs as more active, supportive, and better structured.*

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**KEY WORDS:** Vietnam; assessment; residential; PTSD.

Despite the increasing number of clinical descriptions and preliminary outcome studies of specialized residential units for posttraumatic stress disorder (PTSD), no standardized methodology has been employed to measure dimensions of the program structure, content, and social climate within these units (Arnold, 1985; Berman, Price, & Gusman, 1982; Hammarberg & Silver, 1994; Johnson, Feldman, Southwick, & Charney, 1994; Johnson

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et al., 1996; Perconte, 1989; Scurfield, Kenderdine, & Pollard, 1990; Silver, 1986). The development of such a methodology will be essential to identification of specific characteristics of effective programs. Such a study is indeed challenging, since efficacy may be influenced by a wide variety of structural, content, and process factors operating within these units. This article will present a comprehensive assessment tool for residential treatment programs, and apply this assessment methodology to a specific question: how are specialized residential PTSD units established by the Department of Veterans Affairs (DVA) distinct from general psychiatric units that treat PTSD patients within the same medical centers? The term "residential" will be used to designate these inpatient units, and should be differentiated from the term as it is used by the community mental health system to refer to halfway houses.

An essential task facing clinical leaders as well as institutional sponsors such as the DVA is whether to establish separate units for the specialized treatment of PTSD. The unique nature of the etiology and treatment of PTSD has raised questions regarding the feasibility of treating PTSD patients on the same unit with general psychiatric patients (Schwartz & Doherty, 1987). Just as the VA has established specialized units for the treatment of Vietnam veterans with PTSD, specialized units have also been proposed for dissociative disorders and sexual abuse (Bloom, 1994; Braun, 1986). In the process of evaluating the efficacy of these units, it will be important to be able to identify the components that characterize successful programs. Though the current study will focus exclusively on DVA treatment programs, the methodology proposed here may be appropriate for a wide range of inpatient settings and programs.

This study will compare the treatment programs of specialized residential PTSD units (SIPUs) and general psychiatry units (GPUs) that also treat PTSD patients within the VA. The study was designed to compare these units in three areas: program structure, content, and perceived social climate.

### Conceptual Basis for Assessment

The conceptual basis for our comprehensive assessment of residential treatment programs relies on a systems perspective (Berrien, 1968; Miller & Rice, 1967; von Bertalanffy, 1968), because a residential unit is a subsystem of a psychiatry service within larger hospital and social systems. A full understanding of the impact of a treatment program on the patients must take into account the many complex interactions occurring both inside and outside of the immediate clinician-patient interaction. We have grouped these variables into three major dimensions: structure, content,

Table 1. Summary of Treatment Program Assessment Scale (TPAS)

Structure	
I. External Boundaries	
A. Unit Differentiation	
1. Free-standing program or within larger unit	
2. Control over admissions by unit staff or larger system staff	
3. Require screening prior to admission or direct admission	
4. Cohort admissions or continuous admissions	
5. Defined or variable length of stay	
6. Waiting list	
7. Differentiation Index (total of above)	
B. Patient Selectivity (Admissions criteria)	
1. Diagnostic Exclusion Index	
2. Behavioral Exclusion Index	
II. Internal Boundaries (Program regulations)	
A. Behavioral criteria for sanctions	
B. Behavioral criteria for discharge	
C. Behavioral criteria for readmission	
D. Substance abuse screening	
III. Demand	
A. Number of beds	
B. Staff/bed ratio	
C. Length of stay	
D. Percent occupancy	
E. Turnover rate	
F. Number on waiting list	
G. Number screened per admission	
H. Number of hours per week of treatment	
Content	
I. Subject matter	III. Interpersonal arena
A. Current relationships	A. Alone or dyad
B. Life skills	B. Family
C. Substance abuse	C. Group
D. PTSD symptoms	D. Milieu
E. War zone experiences	IV. Prescriptive status
II. Purpose	A. Mandatory
A. Exploratory-expressive	B. Individually prescribed
B. Educational	C. Optional
C. Behavioral practice	V. Location
D. Ceremonial/bonding	A. Inside unit
E. Managerial/administrative	B. Outside unit
F. Diversional	VI. Amount of time
G. Medical	A. Length of session
	B. Number of sessions/wk
Perceived Social Climate	
I. Relationship dimension	III. Systems maintenance dimension
A. Involvement	A. Order
B. Support	B. Clarity
C. Spontaneity	C. Staff control

Table 1. (continued)

II. Treatment program dimension	IV. Combat discussion
A. Autonomy	A. Level of combat discussion
B. Practical problem orientation	
C. Personal problem orientation	
D. Anger and aggression	
1. Therapeutic anger	
2. Hostile anger	

and social climate. Much of the following discussion is informed by the work of Rudolph Moos (1973), who for many years has been developing methods for describing and evaluating the service delivery and effectiveness of treatment programs. The relevant characteristics of treatment programs are listed in Table 1.

### Structure

Essentially, structural variables refer to how and to what degree the program is differentiated from its surrounding system, and how and to what degree differentiations are maintained within the program. These *external and internal boundaries* determine the overall manner in which the program is managed. In addition, the *demand* on the program, based on its capacity and flow, determines the amount and even nature of resources that can be directed toward the patients' treatment.

Programs that are highly differentiated from their surrounding system tend to (1) be free-standing rather than a sub-unit within a larger unit, (2) maintain their own control over admissions, (3) require patients to be screened prior to admission, (4) admit patients in cohorts rather than continuous admissions, (5) have a fixed length of stay, and (6) maintain a waiting list. External boundaries are also reflected in the degree of *patient selectivity*, that is, the strictness of diagnostic and behavioral criteria for admission to the unit. Programs with strong external boundaries (i.e., greater unit differentiation and patient selectivity) are presumably more likely to have greater internal cohesion, clarity of purpose, and order (Moos, 1973). However, in comparison with units that have more permeable boundaries and are more integrated into the wider system, units that are highly selective must negotiate with the wider system regarding patients they refuse entrance, which usually requires the alternative of another "open" unit within the system. In addition, these units are vulnerable to internal strain when the larger system requires admission of patients not deemed appropriate.

Internal differentiation is reflected in the strictness and complexity of program rules and regulations. Characteristics of programs with greater in-

ternal differentiation include more strict and more broadly defined criteria for implementing sanctions, including discharge from and readmission to the program, as well as frequency of testing for substance abuse. Patients on these units are expected to behave within more narrowly defined, socially approved limits, in comparison to more undifferentiated units that tolerate a wider range of disruptive behavior.

The demand on these programs is highly influenced by their capacity (i.e., number of beds, number of staff, and length of stay), and flow (i.e., number of admissions per week, and number of hours of treatment per week). Programs with larger capacity presumably have greater flexibility, due to having more options for staff coverage, subgrouping patients, and rearranging treatments, yet must direct a larger percentage of resources toward managing the greater complexity of the system. Larger units usually require more rules and more rigid application of rules (Berrien, 1968). Finally, by handling greater demand, the program generally serves the mission of the larger institution (e.g., treating more patients in shorter lengths of time), yet places greater strain on individuals within the program. Effective management is able to optimally balance these opposing factors: the needs of the larger system (i.e., demand) and the needs of the individuals within the program (i.e., stress) (Miller & Rice, 1967).

### *Content*

Content variables refer to the nature of the therapeutic components themselves. Generally each program design results in decisions regarding the relevance of each treatment component to the needs of the patients, and chooses an overall array of components that vary in its specificity or generality to problems potentially experienced by the patients. Treatment components vary in a number of ways: (1) subject matter, (2) purpose, (3) the interpersonal arena in which they occur (i.e., dyad, group, family or milieu), (4) prescriptive status (i.e., mandatory or optional), (5) location (i.e., on or off the unit), and (6) proportion of program time. Presumably the content of each program reflects their particular emphases, and specialized programs are likely to show more specific emphases in their content than general programs.

### *Perceived Social Climate*

Social climate refers to the manner in which the program is actually experienced by the participants, and is presumably a reflection of the integration among the structural and content dimensions of the treatment program. Thus, it is hypothesized that when structural and content dimen-

sions are well-integrated, participants will feel a sense of greater congruence, purpose, and involvement in program activities (Moos, 1973). Poorly integrated systems will be experienced as more conflictual, less focused, and inconsistent, leading to higher levels of distraction from the therapeutic tasks. Moos' (1973, 1988) seminal work in this area forms the basis of our approach. His analysis of residential treatment programs has revealed three main factors: *Relationship* variables such as level of involvement, support, and spontaneity; *Treatment Program* variables such as level of autonomy, personal and practical problem orientation, and expression of anger; and *Systems Maintenance* variables such as order, clarity, and staff control. These dimensions are assessed through self-report measures given to patients and/or staff, and reflect how these aspects of the treatment program are actually experienced by the participants.

### *General Model*

Our model of treatment programs can be summarized as follows: the ultimate outcome of a residential treatment program is directly related to the efficacy of specific treatment elements and the fidelity with which they are implemented by the staff, mediated by intervening structural and social climate variables at the program level. In other words, effective treatment components faithfully administered may be interfered with by a program environment that is poorly structured and experienced by members as poorly integrated. Poor outcome, conceivably, may result from a well-structured and well-integrated milieu containing ineffective treatments and incompetent staff, or alternatively, from a poorly structured and integrated milieu containing efficacious treatments and competent staff. Only a comprehensive assessment of these factors will successfully identify efficacious treatment programs. Toward this goal, we have developed the Treatment Program Assessment Scale (TPAS), and have applied it to the residential treatment of combat-related PTSD in the DVA. Though the TPAS does not encompass a complete assessment of potentially relevant dimensions of a treatment environment, its scales should be generalizable to a broad range of residential programs.

### **Study Question**

Over the past 15 years, a number of VA medical centers have developed specialized residential programs (SIPUs) devoted to the treatment of war zone veterans suffering from PTSD. These programs were initially established in response to veterans' discomfort in being treated on standard psy-

chiatry units, where specific attention to war zone stress was not emphasized (Scurfield et al., 1990). In addition, longer lengths of stay were established (e.g., 2-3 months vs. 2-3 weeks) to allow veterans time to uncover and process their war zone memories within a supportive environment (Chief Medical Director's Committee on PTSD, 1991). These SIPUs were intentionally designed as intensive, long-term treatment programs.

Therefore, based on these considerations, we hypothesized that SIPUs, in comparison with general psychiatric units, would be characterized by (1) stronger external and internal boundaries (i.e., greater unit differentiation, patient selectivity, and stricter behavioral regulations); (2) lower external demand (rate of admissions) but higher internal demand (more hours of treatment per week); (3) more treatment time spent on war zone trauma; and (4) more favorably perceived social climate.

The generalizability and validity of this naturalistic study are limited primarily by the lack of randomization of subjects to group condition. Presumably, veterans on SIPUs and GPUs may differ on important individual characteristics (e.g., comorbidity, severity of illness, combat exposure) that explain differences between units. The current study should therefore be understood as an initial effort in characterizing the differences between these treatment environments.

## Method

### *Sites and Subjects*

Sites consisted of all 19 SIPUs that were operational for at least 1 year at the time of the study. Within each medical center except one, a generalized psychiatric unit (GPU) that routinely treated PTSD patients was able to be identified for comparison purposes, resulting in 18 GPUs. These 37 units were surveyed using the Treatment Program Assessment Scale (TPAS) during the months of March-April, 1991.

Subjects were male Vietnam veterans being treated on either a SIPU ( $n = 453$ ) or GPU ( $n = 159$ ) during March and April 1991. All veterans were diagnosed with PTSD by the staff of the respective programs through clinical interviews.

### *Data Collection*

Data for the structural and content measures were gathered through a detailed program survey completed by the Director of each SIPU or



GPU. Content measures were not completed for 3 GPUs. Data for the perceived social climate measures were gathered through a 110-item true-false questionnaire completed by individual veterans with a clinical diagnosis of PTSD on each unit. The data for the GPUs, therefore, was collected only from the veterans with PTSD on the unit, not other psychiatric patients also being treated.

### *Measures*

*Structure.* Items on the Director's questionnaire included questions about unit differentiation, patient selectivity, program regulations, and demand (see Table 1). Indexes for Differentiation, Selectivity (i.e., Diagnostic Exclusion Index, Behavioral Exclusion Index), and Internal Boundaries (Behavioral Sanctions Index, Behavioral Discharge Index, Behavioral Readmission Index, Substance Abuse Tox Screening) were developed by summing individual items within each category. Examples of individual items on the Diagnostic Exclusion Index include schizophrenia, major depression, bipolar disorder, organic brain disorder, substance abuse, and court-referred. Examples on the Behavioral Exclusion Index include danger to self, needs medications, poor motivation, and active substance abuse. The Behavioral Readmission Index is based on the number of months after discharge required before readmission could be considered. Substance Abuse Tox Screening Index consisted of whether drug or alcohol testing was a requirement of the program.

*Content.* A major challenge was how to describe the salient dimensions of heterogeneous services across all 37 programs. Specific information was gathered from the Program Directors on each treatment component within their program (e.g., group therapy, anger management) in order to gain a full and standardized characterization of the clinical interventions provided (see Table 1). Each treatment component was classified by (1) subject matter, (2) purpose, (3) interpersonal arena, (4) prescriptive status, (5) location, and (6) amount of time. If a particular treatment component was best characterized by two clinical emphases, a primary and secondary choice were weighted 6:4 in subsequent calculations. Using this broad array of data, it was possible to measure the total number of treatment hours provided by each program to the patients per week and the proportion of all treatment time spent in each of these treatment categories.

An initial version of the content measure was developed and discussed with several program directors, and then revised. Specific definitions of each category were developed and provided within the questionnaire. The completed measure was then filled out by four senior clinical leaders of

one program. Intraclass correlation coefficients on category totals were moderately high (all  $r_s > .80$ ).

*Perceived social climate.* The questionnaire used in this study was designed to elicit the veterans' personal perceptions of the treatment program. The questionnaire is a revised and expanded version of the Community Oriented Program Environment Scale (COPES), a well-known and widely used social climate scale developed by Moos (1988). The COPES consists of 100 true-false items that assess treatment environment along three primary dimensions and 10 subscales. Subscale scores range from 0 to 10. The subscales are highly internally consistent and show good test-retest reliability. The Relationship Dimension subscales of Involvement, Support and Spontaneity assess the patients' investment in the program, and the type and intensity of relationships among patients, and between them and the staff. The Treatment Program Dimension subscales of Autonomy, Practical Problem Orientation, Personal Problem Orientation, and Anger Expression measure the patients' perceptions of the orientation and philosophy of the program. Anger Expression is further subdivided into two subscales: Therapeutic Anger, reflecting the positive value of expressing emotions; and Hostile Anger, reflecting threatening interpersonal behavior. The Systems Maintenance Dimension subscales of Order, Clarity, and Staff Control assess the patients' perceptions of the degree to which the ward is organized and controlled. In addition, the authors have added a 10-item subscale specific to PTSD programs, labeled Combat Discussion, based on items of the Personal Problem Orientation subscale, which assesses the patients' perceptions of the degree to which staff and patients openly discuss combat experiences ( $\alpha = .85$ ) (Fontana, Rosenheck, & Spencer, 1993).

### *Data Analysis*

Programs were classified into two types for data analysis: SIPUs ( $n = 19$ ) and GPUs ( $n = 18$ ). On the social climate measure, subjects were compared across programs, SIPUs ( $n = 453$ ), GPUs ( $n = 159$ ). Student's  $t$ -tests were used to test the statistical significance of differences between program types on interval scale variables. The chi-square test was used to test the statistical significance for differences between program types on categorical and ordinal variables. All tests were corrected for multiple comparisons using the Bonferroni method.

## Results

### *Structure*

Table 2 lists the results for structural measures. SIPUs have more strongly defined external boundaries than GPUs: They are more often free-standing, more likely to have control over their own admissions, screen patients prior to admission, admit in cohorts, have defined length of stay, and require waiting lists. They are also much more selective in terms of both diagnostic and behavioral criteria. SIPUs are also more internally differentiated, applying more strict standards for sanctioning, discharging, and readmitting patients. However, both types of units typically require substance abuse screening.

SIPUs are somewhat smaller and have longer lengths of stay, but occupancy and staffing are at the same levels as GPUs. As a result of the longer length of stay in SIPUs, the admissions per occupied bed per year (i.e., the turnover rate) is considerably lower than in the GPUs. The number of patients screened for admission and placed on waiting lists are much higher in the SIPUs. Patients on average wait 85 days for screening appointments and another 80 days for admission. As expected, SIPUs offer substantially more hours of treatment per week.

### *Content*

Table 3 lists the results for content measures. The principal area of difference between program types emerges in Subject Matter: SIPUs spend more time on PTSD symptoms and war zone experiences than GPUs. Similar proportions of time are spent addressing general areas of current relationships, life skills, and substance abuse. Purpose of the activity was similar across the two program types except that GPUs spend more time on managerial-administrative activities. There were no significant differences between SIPUs and GPUs in interpersonal arena or location of activities, though SIPUs have marginally more mandatory activities.

### *Perceived Social Climate*

Table 4 lists the results for social climate measures. On 9 of the 11 main subscales, veterans in the SIPUs rated the environment significantly more favorably than veterans in the GPUs (including perceiving their environment as lower on Staff Control). There were no differences on overall expression of Anger; however, SIPUs were significantly higher on Therapeutic Anger, and marginally lower on Hostile Anger ( $p < .10$ ), than GPUs.

**Table 2.** Comparison of Structural Measures of SIPUs and GPUs from Program Directors' Questionnaire

Measure	Program Type		<i>t</i> ( <i>df</i> = 35) or $\chi^2$ ( <i>df</i> = 1)
	SIPU ( <i>n</i> = 19)	GPU ( <i>n</i> = 18)	
External boundaries			
Unit differentiation			
Free standing?	78%	0%	19.75** <sup>b</sup>
Unit control of admissions?	100%	28%	21.16** <sup>b</sup>
Screening?	95%	11%	26.03** <sup>b</sup>
Cohort admissions?	47%	6%	8.19** <sup>b</sup>
Defined length of stay?	95%	0%	32.21** <sup>b</sup>
Waiting list?	84%	11%	19.77** <sup>b</sup>
Total Differentiation Index	4.99 (.82)	1.20 (1.21)	11.07**
Patient selectivity			
Diagnostic Exclusion Index	4.73 (1.06)	0.28 (.57)	16.19**
Behavioral Exclusion Index	5.21 (.54)	2.28 (1.07)	10.42**
Internal boundaries			
Behavioral Sanctions Index	3.20 (.48)	2.63 (.67)	2.98*
Behavioral Discharge Index	12.89 (2.23)	7.56 (3.58)	5.40**
Behavioral Readmission Index	3.47 (.70)	1.18 (.73)	9.67**
Drug/alcohol screening?	.94	1.00	ns <sup>b</sup>
Demand			
Number of beds	21.68 (7.76)	48.00 (44.99)	2.45 <sup>a</sup>
Staff per occupied bed	.68 (.35)	.74 (.19)	ns
Length of stay (days)	63.05 (24.14)	34.00 (22.20)	3.74**
Percent occupancy	84% (14.74)	86% (14.20)	ns
Turnover rate	5.07 (3.19)	12.24 (8.56)	3.25*
Number screened per admission	1.74 (1.24)	0.40 (.67)	3.99*
Number on waiting list	28.95 (31.15)	3.44 (14.12)	3.23*
Treatment hours per week	29.83 (8.44)	12.92 (6.81)	6.30**

<sup>a</sup>*p* < .10; \**p* < .05; \*\**p* < .01. All values corrected for multiple comparisons.<sup>b</sup>Dichotomous variable tested by chi square statistic, *df* = 1.

Not surprisingly, SIPUs were perceived as having much higher levels of combat discussion. Overall, veterans perceived the environments of the SIPUs as being much more supportive, active, and organized than their counterparts in the GPUs.

**Table 3.** Comparison of Content Measures on SIPUs and GPUs Program Directors' Ratings of Treatment Elements

Measure	Program		t(df = 32)
	SIPU (n = 19)	GPU (n = 15)	
Subject matter			
Current relationships	29% <sup>b</sup> (8.07)	34% (18.97)	ns
Life skills	21% (15.10)	26% (15.44)	ns
Substance abuse	6% (4.61)	11% (15.16)	ns
PTSD symptoms	20% (7.10)	6% (6.65)	5.93**
War zone experiences	17% (8.76)	2% (2.54)	7.44**
Purpose			
Exploratory-expressive	38% (12.80)	33% (26.44)	ns
Educational	18% (7.33)	17% (15.53)	ns
Behavioral practice	17% (9.81)	16% (15.05)	ns
Ceremonial/bonding	7% (6.84)	3% (5.69)	ns
Managerial/administrative	7% (4.97)	15% (10.68)	2.79 <sup>a</sup>
Diversional	8% (11.74)	10% (15.08)	ns
Medical	5% (7.17)	5% (7.94)	ns
Interpersonal arena			
Alone/dyad	16% (10.32)	20% (19.59)	ns
Family	1% (1.01)	2% (2.84)	ns
Group	66% (21.13)	54% (26.83)	ns
Milieu	18% (20.97)	25% (27.11)	ns
Prescriptive status			
Mandatory	89% (12.85)	68% (27.99)	2.72 <sup>a</sup>
Individually prescribed	8% (12.28)	25% (30.31)	ns
Optional	3% (5.12)	7% (11.43)	ns
Location			
Inside unit	93% (9.02)	98% (3.58)	ns
Outside unit	7% (9.02)	2% (3.58)	ns

<sup>a</sup>p < .10; \*p < .05; \*\*p < .01. All values corrected for multiple comparisons.

<sup>b</sup>Proportion of treatment time, %, and (SD).

**Table 4.** Comparison of Perceived Social Climate on SIPUs and GPUs  
(Revised Community Oriented Program Environment Scale, Moos, 1988)

Measures (range = 0-10)	Program		<i>t</i> ( <i>df</i> = 573)
	SIPU ( <i>n</i> = 424)	GPU ( <i>n</i> = 151)	
Relationship dimension			
Involvement	7.87 (2.07)	4.34 (2.98)	13.40**
Support	8.25 (1.87)	5.66 (2.71)	10.82**
Spontaneity	6.22 (2.01)	4.08 (2.19)	11.00**
Treatment program dimension			
Autonomy	5.87 (1.71)	4.26 (1.78)	9.80**
Practical problem orientation	6.61 (2.03)	4.87 (2.46)	7.78**
Personal problem orientation	7.25 (2.23)	4.81 (2.55)	10.36**
Anger and aggression	5.59 (1.89)	5.42 (1.85)	ns
Therapeutic anger	1.19 (.72)	.61 (.67)	8.62**
Hostile anger	4.41 (1.65)	4.82 (1.85)	2.42 <sup>a</sup>
Systems maintenance dimension			
Order	7.92 (2.01)	5.34 (2.76)	10.53**
Clarity	7.61 (1.98)	5.21 (2.65)	10.09**
Staff Control	6.28 (1.45)	6.89 (1.56)	4.40*
Combat discussion	7.58 (2.60)	4.67 (2.70)	11.69**

<sup>a</sup>*p* < .10; \**p* < .05; \*\**p* < .01. All values corrected for multiple comparisons.

Due to the possibility that the results on the social climate measures were influenced by structural variables, particularly the longer length of stay and higher selectivity of patients, a multiple regression analysis was conducted to assess the robustness of these results controlling for the structural differences in the two samples. A combined Active Treatment Index of the eight highly intercorrelated subscales of the COPES was constructed, and then estimated by a dummy variable (SIPU/GPU). Analyses were adjusted for length of stay, Diagnostic and Behavioral Exclusion indexes, and Behavioral Sanctions and Discharge indexes. Even after adjusting for these factors, SIPUs had significantly more favorable treatment environments than GPUs, unstandardized regression coefficient 2.81, *df* = 6,547, *p* < .0001.

### Discussion

The hypotheses of this study were in large measure borne out by the data received from program directors and veterans in these 37 programs. Using a comprehensive measure of treatment programs, SIPUs were found to have stronger external as well as internal boundaries. These units indeed are "special" within their medical centers, being highly selective of the patients who enter, and having more autonomy in unit decision-making. They also are subject to a lower external demand due to longer lengths of stay and lower turnover rate. However, the programs are more intensive, requiring more complex interactions and services within the units, despite similar staffing levels. SIPUs understandably spend more time on PTSD and war zone experiences.

The veterans in the SIPUs perceive them to be significantly more supportive, active, and ordered, reflecting the predicted greater cohesion and clarity of mission found in highly bounded systems. Nevertheless, the multiple regression analysis also indicates that more than structural variables are responsible for the unique integration evident in these programs. The identification with and sense of ownership of these specialized units among the combat veterans may be an important factor in their perceptions of the social climate.

Veterans in the GPUs rated the programs as under more staff control, corresponding with data from program directors who indicated more time was spent on managerial-administrative activities. Given the effort spent by SPU staff establishing control at the entry boundary, it is consistent that less time needs to be spent on control within the unit than on GPUs, which have less control over their admissions. Less staff control is also consistent with the therapeutic community ideology prevalent on many of the SIPUs.

Therefore we have found that the treatment programs offered by specialized residential PTSD units are distinct from those of general psychiatric units within the DVA medical centers surveyed. In their structure, content, and perceived social climate, these programs have been found to offer exceptionally active treatment with high levels of involvement, clarity, and attention to therapeutic goals, and to specifically address issues related to PTSD and war zone experience. These results have important implications for the larger effort to determine the outcome of these programs. Because these units appear to be differentiated and well-functioning, outcome data are more likely to constitute a fair and specific test of their efficacy.

This study has several limitations. First, the data gathered on structural and content measures are based on information obtained from individual program directors, whose reliability could not be assessed, rather than through standardized sources. It is possible that the program directors may

have had a reporting bias in response to their understanding of the intentions and potential effects of the survey they completed.

Second, data on the clinical status and social adjustment of the veterans within these two program types were not collected in this survey, and therefore it is not known whether the results were affected by differences in patient characteristics. Direct patient assessments are necessary to determine the homogeneity of patient samples. The programs described here may serve complementary functions within their medical centers, because each SIPU was paired with a GPU within its medical center, servicing different patient populations or similar populations at different phases of their disorders. Yet it is also possible that these programs compete with each other, drawing patients from a common and relatively limited pool of veterans who seek residential treatment from the VA. Standardized assessment data are being collected simultaneously at several medical centers that hopefully will provide a basis for answering this question.

Third, this study did not address outcome, and the relative clinical efficacy of these different program types. It is possible that both SIPUs and GPUs are more effective for different subgroups of PTSD veterans, or that one program type is overall more efficacious than the other. Alternately, the differences identified between these program types may impact on the morale or identity of the unit, but not affect those processes responsible for treatment efficacy. These questions can only be answered through outcome studies in which veterans are followed up over an extended period of time after discharge from a large number of programs. The current study, however, does provide the data necessary to systematically characterize the major differences among these programs and, eventually, to identify those program components that may be associated with greater clinical efficacy. The development of reliable measures for treatment programs that allow comparison among these highly diverse contexts is essential for improving healthcare planning and design. The methodology employed in this study is an initial contribution to this effort.

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